

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Cancelled).
2. (Previously Presented) A client apparatus comprising:
  - a cache memory which accumulates information externally provided;
  - an accumulation judgment portion which judges whether or not the information to be externally provided is accumulated in said cache memory;
  - a request portion which requests acquirement of information when said accumulation judgment portion judges that the information to be externally provided is not accumulated in said cache memory;
  - an information processor which processes either one of the information accumulated in said cache memory and the information externally provided in response to the request from said request portion;
  - a storage judgment portion which judges whether or not the information externally provided can be stored in said cache memory;
  - an information reduction portion which reduces an amount of the information accumulated in said cache memory based on attribute information composed of preference information of a user and profile information indicative of a process ability of said client apparatus when said storage judgment portion judges that the information externally provided can not be stored in said cache memory; and
  - a control portion which controls said cache memory such that the information externally provided in response to the request from said request portion is stored after the amount of the information is reduced by said information reduction portion.
3. (Cancelled)
4. (Previously Presented) An information providing system comprising:
  - an information source server which provides information in response to a request;
  - a client apparatus; and

a data communication network which connects said client apparatus to said information source server,

wherein said client apparatus comprises:

a cache memory which accumulates the information provided by said information source server;

an accumulation judgment portion which judges whether or not the information to be provided by said information source server is accumulated in said cache memory;

a request portion which requests acquirement of the information to said information source server through said data communication network when said accumulation judgment portion judges that the information to be provided by said information source server is not accumulated;

an information processor which processes either one of the information accumulated in said cache memory and the information provided by said information source server in response to the request from said request portion;

a storage judgment portion which judges whether or not the information provided by said information source server can be stored in said cache memory;

an information reduction portion which reduces the amount of the information accumulated in said cache memory based on attribute information composed of preference information of a user and profile information indicative of a process ability of said client apparatus when said storage judgment portion judges that the information provided by said information source server can not be stored in said cache memory; and

a control portion which controls said cache memory such that the information provided by said information source server in response to the request from said request portion is stored after the amount of the information is reduced by said information reduction portion.

5. (Previously Presented) The information providing system according to claim 4, wherein said data communication network comprises:

a gateway apparatus which is connected to said client apparatus through a first data communication network and connected to said information source server through a second data communication network, wherein said gateway apparatus comprises:

a second request portion which requests acquirement of the information to said information source server through said second data communication network with said attribute information and communication attribute information indicative of communication abilities of said first data communication network and said second data communication network when the request of said request portion of said client apparatus is received through said first data communication network;

a second cache memory which accumulates the information provided by said information source server in response to the request from said second request portion; and

a transfer portion which transfers the information accumulated in said second cache memory to said client apparatus through said first data communication network based on said attribute information and said communication attribute information.

6. (Original) The information providing system according to claim 5, wherein said information source server provides the information to said gateway apparatus based on said attribute information and said communication attribute information in response to the request from said second request portion.

7. (Original) The information providing system according to claim 6, wherein said gateway apparatus provides the information to said client apparatus based on said attribute information and said communication attribute information in response to the request from said request portion.

8. (Previously Presented) The information providing system according to claim 7, wherein said client apparatus further comprises an attribute information change portion in which at least one of said attribute information and said communication attribute information is dynamically changed.

9. (Previously Presented) The information providing system according to claim 8, wherein said information reduction portion removes the information having a low priority

from said cache memory, wherein the priority is determined based on said attribute information.

10. (Previously Presented) The information providing system according to claim 9, wherein said information reduction portion compresses the information stored in said cache memory based on said attribute information.

11. (Previously Presented) The information providing system according to claim 10, wherein the information provided by said information source server includes menu data for selecting an item and is linked to other information corresponding to other menu data, the other information being provided by said information source server based on the selected item, and said control portion controls said cache memory such that a remaining capacity of said cache memory is increased by changing the link generated between the menu data and the other menu data, every time one of the menu data and the other menu data is stored in said cache memory.

12. (Previously Presented) The information providing system according to claim 11, wherein said attribute information used in said client apparatus is prepared for each predetermined usage tendency.

13. (Original) The information providing system according to claim 12, wherein said attribute information used in said client apparatus can be changed into other attribute information having another predetermined usage tendency.

14. (Cancelled).

15. (Previously Presented) An information providing method comprising:

- (1) providing an information source server and a client apparatus;
- (2) accumulating information provided by said information source server in a cache memory;
- (3) judging whether or not the information to be provided by said information source server is accumulated in said cache memory;

(4) requesting acquirement of the information to said information source server when said judging step (3) judges that the information to be provided by said information source server is not accumulated in said cache memory;

(5) processing either one of the information accumulated in said cache memory and the information provided by said information source server in response to the request;

(6) judging whether or not the information provided by said information source server can be stored in said cache memory;

(7) reducing the amount of the information accumulated in said cache memory based on attribute information composed of preference information of a user and profile information indicative of a process ability of said client apparatus when said judging step (6) judges that the information provided by said information source server can not be stored in said cache memory; and

(8) controlling said cache memory such that the information provided by said information source server in response to the request is stored after the amount of the information is reduced by said reducing step.

16. (Original) The information providing method according to claim 15, further comprising:

(9) providing a gateway apparatus which is connected to said client apparatus through a first data communication network and connected to said information source server through a second data communication network;

(10) requesting acquirement of the information to said information source server through said second data communication network with said attribute information and communication attribute information indicative of communication abilities of said first data communication network and said second data communication network when the request of said requesting step (4) is received through said first data communication network;

(11) accumulating the information provided by said information source server into a second cache memory in response to the request in said requesting step (10); and

(12) transferring the information accumulated in said second cache memory to said client apparatus through said first data communication network based on said attribute information and said communication attribute information.

17. (Original) The information providing method according to claim 16, wherein said information source server provides the information to said gateway apparatus based on said attribute information and said communication attribute information in response to the request in said requesting step (10).

18. (Original) The information providing method according to claim 17, wherein said gateway apparatus provides the information to said client apparatus based on said attribute information and said communication attribute information in response to the request in said requesting step (4).

19. (Original) The information providing method according to claims 18, wherein said reducing step (7) removes the information having a low priority from said cache memory, wherein the priority is determined based on said attribute information.

20. (Original) The information providing method according to claims 19, wherein said reducing step (7) compresses the information stored in said cache memory based on said attribute information.